

# PATENT ABSTRACTS OF JAPAN

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## (54) SOUND IMAGE EXPANSION DEVICE

### (57)Abstract:

**PURPOSE:** To obtain enough feeling of sound expansion even when the distance between plural speakers is set small.

**CONSTITUTION:** A left sound signal L is amplified by a dry amplifier 12 and outputted in sound by a side speaker 13, delayed by an amount of delay time T1 by a delay circuit 14, attenuated by an attenuator 15 at an attenuation ratio of A1 and outputted in sound by a left front speaker 17. A right sound signal R is amplified by a dry amplifier 22, outputted in sound by a side speaker 23, delayed by an amount of delay time T2 by a delay circuit 24, attenuated by an attenuator 25 at an attenuation amount of A2 and outputted in sound by a right front speaker 27. By properly setting the delay time T1 and T2 and the attenuation ratios A1 and A2, enough feeling of sound expansion can be obtained even when the distance between the plural speakers is set small.

